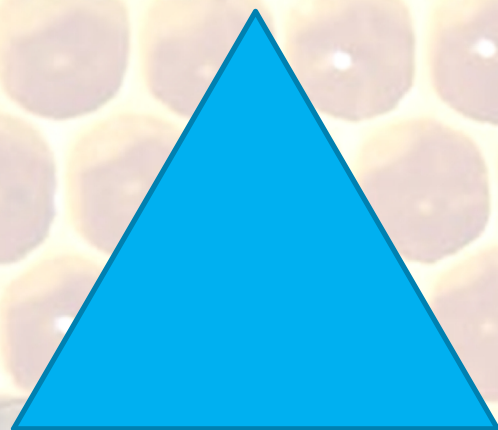


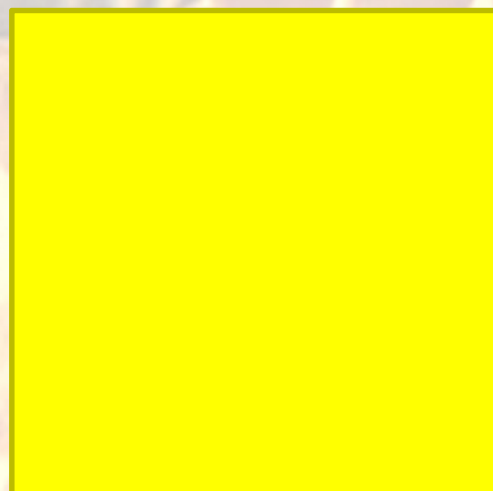
What shape is  
the structure?  
Why do bees  
use this shape?

Bees create a wax  
structure to  
store honey. This  
structure is called  
a honeycomb.

Other bees collect  
nectar from flowers,  
process and store it  
in the empty cells in  
the honeycomb.



What is special about this shape?  
What facts do you know?



What facts do you know?

What is the link between this shape and  
the one above?

What is the next shape in the pattern?

Copy and complete the table to work out the size of one interior angle of each of the polygons below.

Shape	Triangles inside	Total angle sum	Size of one angle
Triangle	1	$1 \times 180^\circ = 180^\circ$	$180^\circ \div 3 = 60^\circ$
Quadrilateral	2	$2 \times 180^\circ = 360^\circ$	
Pentagon			
Hexagon			
Heptagon			
Octagon			

Why do (regular) triangles, quadrilaterals and hexagons tessellate, but other polygons do not?

Draw diagrams to illustrate your answer.